



creditbinder™

creditbinder is an online credit bureau for new economy businesses, their customers,  
and their trading partners.

Our consumer-friendly recordkeeping services enable an unprecedented level of trust  
between creditors, the subjects of credit records, and ourselves.

## Electronic Commerce Architecture Project Spring 2000

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## Background

Credit reporting agencies are the backbone of the trust model that underlies modern commerce. From small family retailers to the largest multinational corporations, credit bureaus' databases are the "permanent record" of credit activity, and their summary reports the standard measure of trustworthiness for those who need commercial or consumer credit and the trading partners who extend that credit. For consumers, the applications of credit checks have expanded to include measures of trustworthiness and stability in domains not directly related to financial transactions.

Credit data are generated and consumed by retailers, lenders, and others who must assess the risk of extending credit to a person or business. Small subscribers usually join credit networks to only view credit reports. Larger creditors, whose information about customers is significant, reliable and heavily-automated, actively participate in the credit reporting process as "information providers," frequently and automatically adding to credit reporting agencies' databases of individual credit histories whenever a bill is issued, payment is received, or change in credit status occurs.

Credit bureaus also participate in active information gathering, enhancing their databases with information gleaned from public records and other source, meta information generated when an outside entity queries their databases, and attempts at blending non-standard data with existing credit profiles to create a richer portfolio. Now bureaus are adding to their repertoire of services with sophisticated analysis tools including summary measures of individual creditworthiness, likelihood of on-time payment, and probability of bankruptcy.

Consumers have traditionally had a difficult time accessing, understanding, and amending or correcting information held on file about them by credit bureaus. The US Congress took note of this problem, recognizing the threat to individual liberty of an unregulated credit-reporting industry. In 1970, Congress passed the Fair Credit Reporting Act (15 U.S.C. § 1681, aka "FCRA"). New developments in technology, unpopular activities by credit reporting agencies, and an ever-expanding role for credit reports in diverse applications including employment applications and housing rentals, led to amendments that expanded and occasionally dictate consumer protections. FCRA is an actively-maintained statute, most recently amended in January, 2000.

## Unexpected trust relationships

An outsider unacquainted with the history of credit bureaus might assume that credit reporting agencies and those about whom they report enjoy a symbiotic relationship. Such an outsider might assume that credit reporters make verified, helpful information available to assist consumers who need documentation to support requests for car loans, credit cards or home mortgages, and that consumers actively work with the credit reporters to ensure accurate, up-to-date records.

In practice, however, a peer-valued ally-to-ally relationship has developed only between credit reporting agencies, those customers who pay them for database access, and those who actively feed information to the databases. The relationship between credit reporting agencies and the subjects of their reports has been adversarial at best, and may be fairly described as typically hostile. For example, credit agencies maintain proprietary algorithms to score consumer "trustworthiness" but hide the mechanisms employed to generate the highly-abstracted summaries. Until recently, consumers faced substantial hurdles when attempting to correct erroneous information on their reports, when trying to attach explanations to otherwise-problematic records, or even when attempting to view the entire contents of their own records.



Recent amendments to the FCRA have addressed some of these issues. While the relationship between the surveilled and their overseers has not changed significantly, consumers are now better empowered to defend themselves against abuses. For example, a 1997 amendment to the FCRA required major credit bureaus to maintain toll free numbers and “ready access” so that a consumer is connected to a representative within several minutes of their call. While credit bureaus may charge consumers for reports about themselves, the cost is capped at \$8.50 per report, with exceptions for those on welfare, unemployed job-seekers, and anyone recently denied credit due to information supplied by a credit reporting agency. Several states have passed legislation further reducing the cost of a personal credit report for consumers. In Massachusetts and five other states, the reports are free.

### Credit bureaus in the news

**March 8, 2000**, ©2000 Phillips Business Information, Inc., Credit Risk Management Report, Vol. 10, No. 4

In a unanimous ruling, the FTC has ordered Trans Union - one of the nation's three largest credit bureaus - to stop selling consumer reports in the form of target marketing lists to marketers who lack an authorized purpose for receiving them under fair lending. Trans Union plans to appeal the ruling.

**April 10, 2000**, National Mortgage News ©2000 American Banker-Bond Buyer a division of Thomson Publishing Corporation, Vol. 24; No. 30; Pg. 1

The heated controversy over E-Loan giving consumers their FICO scores has boiled over, with Equifax, one of the three main credit repositories, cutting off E-Loan's electronic credit-data feed. Though all three credit repositories complained after E-Loan started giving consumers free access to their FICO scores on the password-protected 'My E-Loan' section of its website, Equifax demanded that E-Loan's electronic credit information supplier cut E-Loan off or face denial of service itself. Credit InfoNet CEO Tom Midkiff told NMN that after he repeatedly asked that Equifax put its demand in writing, Equifax summarily cut off the electronic feed to all his customer on April 3. Service resumed the following day to all customers except E-Loan.

E-Loan's Larsen said he was disappointed “because we believe consumers should have access to their data.” He charged that San Rafael, CA-based Fair Isaac and Company, creator of the models used in formulating scores, “is afraid that consumers are going to game their scores in order to improve their credit standing. We think that’s exactly what consumers should be able to do. The bottom line,” he said, “is that consumers have a perfect right to have their credit information and use it as they see fit.”

**March 3, 2000**, © 2000 American Banker, Inc., The American Banker, Pg. 2

*Trade Group Coalition Draws Up Battle Plan Against Privacy Laws*

Taking the offensive, a coalition of financial services trade groups on Thursday announced plans to fight tough privacy laws being considered in state legislatures. The council wants to persuade state lawmakers to hold off on legislation.

An amendment to the financial reform law by Sen. Paul Sarbanes, D-MD, allows states to trump the federal law by enacting tougher protections of consumers’ financial information. According to Roberta Meyer of the American Council of Life Insurers, there are already 35 privacy bills pending in 22 states. Many of the proposed laws would force businesses to receive consumer consent -- known as an "opt-in" requirement -- before their personal financial information could be sold or used for marketing purposes.



**April 10, 2000**, © 2000 American Banker-Bond Buyer a division of Thomson Publishing Corporation, Credit Union Journal, Vol. 4; No. 15; Pg. 3

Concerns over National Credit Union Association's (NCUA) proposed rules on member privacy have caused a maelstrom among credit unions' third-party vendors, which see the measure as costly and burdensome to implement for them and for credit unions.

VISA USA, which claims more than 4,000 credit union clients, said the proposal "would have a disastrous effect on financial institutions, especially smaller institutions," because it will require credit unions to disclose the sharing of member information with unaffiliated third-parties, like credit card processors. VISA also expressed concerns about provisions requiring consumers to "opt-out" of their credit union's information sharing arrangements with third-party vendors, like VISA.

Equifax, which provides processing services for more than 2,500 credit unions, took issue with the proposed rule's definition of "nonpublic personal information," which would have to be disclosed as being shared with nonaffiliated third parties. That definition, said the Atlanta-based firm, does not include the term "financial," leaving a much broader universe of information than originally intended by Congress when it wrote the enabling law last year, the Financial Modernization Act. Equifax also expressed concern that NCUA's proposed rule would prevent it from sharing credit reports, its major line of business, with other third parties unless those reports are shared through the credit union.

Marketing giant Cendant Corp., which has relationships with more than 2,000 credit unions, also expressed concerns about the definition of nonpublic personal information and a provision it believes would prevent it from using member information for marketing.

### Identity thefts involving Social Security Numbers are growing a record rate

**April 3, 2000**, Identity Theft Takes Spotlight on the Hill, ©2000 Phillips Business Information, Inc., Vol. 10, No. 6

All indications point to the fact that identity theft and the risk it poses to lenders is on the rise. Although specific numbers are hard to come by due in part to the fact that lenders are not eager to advertise the fact they have been hit by fraud, many regulators and law enforcement agencies say the numbers are staggering.

Jodie Bernstein, director of the FTC's Bureau of Consumer Protection, told a Senate Subcommittee that a newly-installed FTC hotline, set up to answer identity theft calls, is already taking 400 calls a week. Her testimony indicates that call volume will eventually grow to 200,000 calls a year. "Anecdotes and news stories provide one indication of the growth of identity theft," Bernstein said. "Available statistics confirm this trend. The General Accounting Office, for example, reports that consumer inquiries to Trans Union's Fraud Victim Assistance Department increased from 35,235 in 1992 to 522,922 in 1997, and the Social Security Administration's Office of the Inspector General conducted 1153 Social Security number misuse investigations in 1997 compared with 305 in 1996. In 1999, almost 39,000."

According to the latest research from the Government Accounting Office, financial losses due to identity theft grew from \$442 million to \$745 million between 1995 and 1997.

The problem may be even bigger. "It is estimated that over 2,000 cases of identity fraud occur every week costing approximately \$2 billion a year," said Sen. Tom Harkin (D-IA), asking for a new study of the problem by the United States Postal Service.



## The European Union

Companies and individuals in European Union states are protected by comprehensive and highly restrictive legislation regarding individual privacy and privacy from ongoing monitoring of the sort carried out by typical credit reporting agencies in the US.

These laws are beneficial to, and protective of, individual privacy rights at the cost of flexibility for traditional North American credit gathering/reporting services. Of the three major credit agencies, only one is active throughout Europe. Fundamentally, the EU rules outlaw or regulate a high percentage of the activities by which traditional credit reporting agencies have earned their profits.

North American credit reporting agencies have claimed that privacy restrictions on consumer data, particularly in the U.S., would directly contribute to higher interest rates and reduced credit availability for consumers.

But the entirety of the “EU Problem” of credit reporting involves more than just privacy. As the world becomes smaller, and trading partners interact with increasing numbers of peers across international boundaries, the issue of a unified, world-wide financial reputation and credit identity will become paramount. Foreign citizens come to America to find that no matter how creditworthy they may have been in their native countries, they effectively have no credit history here and are considered “not trustworthy” by lenders. Often, foreigners can initially qualify for little more than a cash-secured credit card until they “build a credit history”. Similar problems afflict Americans traveling, working and living abroad.





## The CreditBinder solution

The current credit-reporting environment has some prominent features:

- Restrictions levied by the FCRA
- Stringent privacy rules and process controls mandated by the EU
- The inclination of the “big three” credit bureaus to pursue heavily-regulated, subject-hostile activities and information sales

Despite the potentially ominous overtones of such an environment, we see opportunities in credit markets for a global competitor driven by a new profit model that acts in part in the direct interest of the subjects of its credit reports.

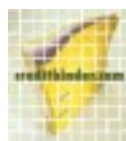
We also see several relevant emerging trends:

- An increase in small, or one-time, Internet-enabled international transactions
- Extensive coverage of privacy issues and anecdotal stories of privacy violations
- Skyrocketing use of Social Security Numbers as the basis of identity thefts
- Development of XBRL (Extensible Business Reporting Language)

Consumers are hungry for privacy controls to protect them not only against outright identity theft but also against what many consider intrusive access to “private” information. XBRL, an open-standards format for the publication of financial reports, will drive the construction of the first open-standards credit reporting service for the open world of the Internet.

The time is right for a new model that repairs the problems of the old model by rewriting the traditional “script” that drives the interactions of creditors, credit bureaus, and the subjects of credit history files

To date, no credit records system has been designed to address the needs of lenders and report subjects simultaneously. Creditbinder will facilitate a negotiated and managed relationship between consumers and those who need, or want, to access information about them, earning its profits through the management of a mutually-beneficial relationship and credit report portfolios, rather than by acting in opposing roles of adversary and proponent.



## Target audiences

- Highly-educated, affluent new-economy consumers who are concerned about the privacy and accuracy of their records, who want a measure of control over the distribution of their files
- Emerging industries – Internet and other highly-wired new economy companies
- Emerging economies – the former “third world”, C2C microeconomies, and their customers
- Much smaller players than are currently supported in credit/reputation reporting
- Large players eager to win new-economy customers to their upstart Internet operations
- International consumers and companies, whose lives will be directly simplified by the first truly global, verifiable credit and financial reputation dossier

## creditbinder Products

### Personal creditbinder

- Secure, accountable credit records whose distribution is directly controlled by the consumer  
creditbinder holders can provide a unique identifying number to each of their creditors – the numbers are tracked and reconciled in our system. These numbers, provided instead of the consumer’s Social Security number, identify the consumer to the creditor but keep private information private. ID numbers may be authorized for long-term (generally required for long-term debts like mortgages and car loans) or one-time use (for example, when conducting a transaction with a new trading partner)
- No software required, just contact us through your favorite secure web browser (Netscape or IE)

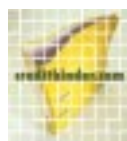
### Business creditbinder

- Same security and privacy features as the personal creditbinder, plus...
- Services tailored for business, including direct relationships with Internet lenders, and financial services integrated with our reputation management system
- Multiuser authentication
- No software required, just use your favorite web browser (Netscape or IE)

### Top Security creditbinder

- Experience the highest level of confidentiality, security and control by adding CreditControl™ software to your computer to manage a creditbinder so secure, even we can’t read it. Records are encrypted before storage using a secret code to create records that only you can decrypt. Creditors may add records to your file as needed, using your unique identifying code. When anyone requests your records, your authorization first approves the data transfer, then unlocks the records using the hardware key and password that only you possess, for a one-time, authenticated transmission to the creditor. You control the key. You control all access. This is the world’s only consumer-controlled, consumer-encrypted credit portfolio system.

Top Security creditbinder accountholders receive two secure hardware keys and a card reader for their home computer. Then keep one key with you. Lock the other away in a safe place or place it in the care of an attorney or other confidant. If both these keys are ever lost, your records can never be recovered. If you want the highest level of protection but are concerned about losing your keys, an independent, bonded key escrow service will securely store one copy of your hardware key using procedures approved by the country’s top security and financial auditing firms.



## Discussion of regulatory environment and markets

As previously discussed, the FCRA in the United States sets a very high bar for the conduct of credit reporting agencies. Credit storage and reporting is highly regulated, in part due to abuses by existing and former credit reporting agencies. The upside of the FCRA for a newcomer is that it thoroughly levels the playing field even for newcomers through its specific proscriptions of processes and constraints on reporting agency conduct.

Consumers are becoming highly educated about the process of credit management and reporting. The Internet generation is well informed about individual rights and the duties of creditors. We believe the time is right for a credit reporting agency – employing new processes and systems – that acknowledges credit-savvy consumers and actively engages them in the reporting and information-management process.

Federal and state limits on the maximum that may be charged for a personal credit report suggest the trend toward free or low-cost personal credit monitoring will continue. Therefore, this segment cannot be considered a profit center. By arriving first on the market with free-for-consumers credit reports, we can leverage this unique opportunity.

## Key competitors and concerns

The major credit reporting agencies in the US and much of the developed world are so well-entrenched that they have been referred to for some time, in the halls of Congress and elsewhere as the “big three”. The advantages of being one of the “big three” includes substantial cash reserves, long-standing relationships with information providers, and well-evolved, sophisticated computer systems.

These advantages are significant. Creditbinder will begin with a low-key approach, signing up willing creditors, and Internet-only financial services providers including banks, merchants, and popular consumer and business websites. Our success will depend upon acquiring a critical mass of consumers who are willing to sign up for a personal creditbinder, and upon signing a critical mass of product suppliers willing to rely upon the information we provide.

We have an opportunity, with each consumer’s permission, to “seed” their credit report with data from the major credit reporting agencies, thereby instantly populating our database with full consumer credit histories to use as a starting point. In addition, the creditbinder system can be used as an “overlay” over existing credit records providers, allowing us to selectively mask information the consumer does not wish to share with creditors, while assuring that information requests are populated with the latest information from all sources. In that way, creditbinder is an “infomediary” – identifying and certifying the true source of the information, and its validity, while adding a layer of higher-quality information and consumer-friendly practices. This model may prove beneficial for a quick start. As reporting sources begin to connect to our records system, our records will become more authoritative, and we will become less reliant on outside sources of information.

